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10/797,950	03/10/2004	Toru Takuchi	42530-6800	4866

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EXAMINER

MCCLAIN, GERALD

ART UNIT	PAPER NUMBER
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3653

MAIL DATE	DELIVERY MODE
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07/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/797,950	Applicant(s) TAKEUCHI, TORU	
	Examiner Gerald W. McClain	Art Unit 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-14,17-20,22 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-14,17-20,22 and 24-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment filed 29 May 2007 has been entered.

Claim Rejections - 35 USC § 112

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The first and second columns that are part of the optical guide unit are not described in the disclosure or other claims.

Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Nowhere in the disclosure or claims are the optical guide units *passive*.

Claim 26 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The facets that are part of the reflecting light transmitting member are not described in the disclosure or other claims.

Claim 28 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Nowhere in the disclosure or claims is the reflecting light transmitting member described as a solid plastic optical guide formed internally on the walls of the optical guide.

Claims 9-14 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 9 and 11-12 recite limitation relating to multiple "end" and "column" structures in multiple instances. There is insufficient antecedent basis for this limitation in the claims. Please be absolutely clear as to what specific "end" or "column" is being referenced (examples: second end of the first cylinder, first end of the second cylinder, second end of another structure).

Claims 10 and 13-14 recite the limitation "guiding units" in multiple instances. There is insufficient antecedent basis for this limitation in the claims. Should the limitation be "optical guide units"?

Claim 26 recites the limitation "unitary reflecting light transmitting" in line 2. There is insufficient antecedent basis for this limitation in the claim. There is no clear limitation claimed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-14, 17-20, 22, and 24-29, as understood by the Examiner, are rejected under 35 U.S.C. 102(b) as being anticipated by Plesko (US 5,624,017).

Claim 1: banknote storing unit (21, 22); banknote receiving unit (103); pushers (4, 5); moving unit (M2); optical guide units (See FIG. 10 below, 140, 142, G); light projecting surface (190-192); light receiving surface (See FIG. 10 below, 140, 142, G); surface (195); optical emitter-receiver pair units (See FIG. 10: 2, 147, 148; 3, 137, 138); light emitting element (See FIG. 10: 2, 147, 148); light receiving element (See FIG. 10: 3, 137, 138);

Claim 2: detecting projecting surface (See FIG. 10 below: top of 140, 142, and G); receiver section (See FIG. 10 below, curved sections of 3, 137, 138); optical emitter-receiver pair unit (See FIG. 10: 2, 147, 148; 3, 137, 138); detecting receiving surface (See FIG. 10 below: bottom of 140, 142, and G); emitter section (See FIG. 10 below, curved sections of 2, 147, 148);

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Claim 3: detecting projecting surface (190-192); position detecting optical guide unit (See FIG. 10 below, 140, 142, G); light beam (column 8, lines 40-49); emitter section (See FIG. 10 below, curved sections of 2, 147, 148); position detecting emitter-receiver pair unit (See FIG. 10: 2, 147, 148; 3, 137, 138); reflector member (See FIG. 10 below: top of 140, 142, and G);

Claim 6: detecting projecting surface (See FIG. 10 below: top of 140, 142, and G); detecting receiving surface (See FIG. 10 below: bottom of 140, 142, and G);

Claim 7: optical guide units (See FIG. 10 below, 140, 142, G); optical resin (See column 11, lines 38-29);

Claim 8: optical resin (See column 11, lines 38-29); acrylate resin (See column 11, lines 38-29);

Claims 9: **optical guide unit** (140); **first column** (See FIG. 10 below, top of 140); **second column** (See FIG. 10 below, bottom of 140); **first end of the first column** (See FIG. 10 below, bottom end of top of 140); **first reflecting surface** (See FIG. 10 below, bottom end cross section of top of 140); **first end of the second column** (See FIG. 10 below, top end of bottom of 140); **second reflecting surface** (See FIG. 10 below, top end cross section of bottom of 140); **side surface of the first column** (See FIG. 10 below, inside surface of top of 140); **detecting projecting surface** (190); **side surface of the second column** (See FIG. 10 below, inside surface of bottom of 140); **detecting receiving surface** (See FIG. 10 below, inside surface of bottom of 140); **light projecting surface** (See FIG. 10 below, bottom surface of the bottom of 140);

Claim 10: optical guiding units [sic] (See FIG. 10 below: top of 140, 142, and G); receiving surface (See FIG. 10 below, 140, 142, G); projecting surface (190-192); surface (195); storing unit (21, 22);

Claim 11: **emitter** (147); **light** (column 8, lines 40-49); **first cylinder** (See FIG. G1 below, J); **first end of the first cylinder** (See FIG. G1 below, top of J); **second end of the first cylinder** (See FIG. G1 below, bottom of J); **receiver** (137); **second cylinder** (See FIG. G2 below, H); **second end of the first cylinder** (See FIG. G2 below, bottom of H); **portion of light** (144 and column 8, lines 40-49); **second end of the second cylinder** (See FIG. G2 below, top of H);

Claim 12: second end of the first column (See FIG. 10 below, bottom end of bottom of 140); projecting surface (See FIG. 10 below, bottom surface of the bottom of 140);

Claim 13: banknote receiving unit (103); optical emitter-receiver pair units (See FIG. 10: 2, 147, 148; 3, 137, 138); banknote storing unit (21, 22); passive optical guide units (See FIG. 10 below, 140, 142, G); condition (column 8, lines 49-50);

Claim 14: receiving unit (103); optical emitter-receiver pair units (See FIG. 10: 2, 147, 148; 3, 137, 138); enclosed unit (21, 22); optical guide units (See FIG. 10 below, 140, 142, G); condition (column 8, lines 49-50);

Claim 17: transmitting a beam of light from a receiving unit **towards** an enclosed unit to produce a transmitted beam of light (column 8, lines 40-58);

receiving the transmitted beam of light within the enclosed unit to produce a received beam of light (column 8, lines 40-58);

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reflecting the received light beam to produce a reflected beam of light
(column 8, lines 40-58);

projecting the reflected light beam out of the enclosed unit towards the
receiving unit to produce a projected beam of light (column 8, lines 40-58);

detecting the projected beam of light to indicate a predetermined condition
(column 8, lines 49-50);

Claim 18: detecting the projected beam of light indicates a true condition (column
8, lines 40-58);

Claim 19: interrupting the transmitted beam of light and the projected beam of
light to indicate the condition that an object is disposed between the enclosed unit and
the receiving unit (column 8, lines 40-58);

Claim 20: interrupting the reflected light beam of light to indicate the condition
that an object is disposed at a predetermined position within the enclosed unit (column
8, lines 40-58);

Claim 22: projecting and receiving unit (2, 3); light emitting element (See FIG. 10:
2, 147, 148); photo-detection element (See FIG. 10: 3, 137, 138); light projecting section
(2); light receiving section (3); optical guide assembly (142); light (column 8, lines 40-
49); first condition (column 8, lines 40-58); second condition (column 8, lines 40-58);
banknote position detecting device (21, 22);

Claim 24: projecting and receiving unit (2, 3); cylinders (See FIG. G1 below, J;
See FIG. G2 below, H); first cylinder (See FIG. G1 below, J); one end of the light

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emitting element (See FIG. G1 below, top of J); second cylinder (See FIG. G2 below, H); one end of the photo-detection element (See FIG. G2 below, bottom of H);

Claim 25: optical guide assembly (142); first reflecting surface (See FIG. 10 below, bottom end cross section of top of 140); second reflecting surface (See FIG. 10 below, top end cross section of bottom of 140); light projecting section (2); light receiving section (3);

Claim 26: unitary reflecting light transmitting [sic] (192); planar facets (sides of rectangle internally, see column 11, line 43); first reflecting surface (one side of rectangle internally, see column 11, line 43); second reflecting surface (another side of rectangle internally, see column 11, line 43); surface (another side of rectangle internally, see column 11, line 43);

Claim 27: optical guide assembly (142); optical emitting and receiving guide position (See FIG. 1 and FIG. 10, 142); projecting and receiving unit (2, 3); reflecting light transmitting member (192);

Claim 28: reflecting light transmitting member (192); solid plastic optical guide (see column 11, line 38; 142); first reflecting surface (one side of rectangle internally, see column 11, line 43); second reflecting surface (another side of rectangle internally, see column 11, line 43);

Claim 29: first and second cylinder (See FIG. G1 below, J; FIG. G2 below, H; respectively); one piece (See FIG. G1 below, J; FIG. G2 below, H);

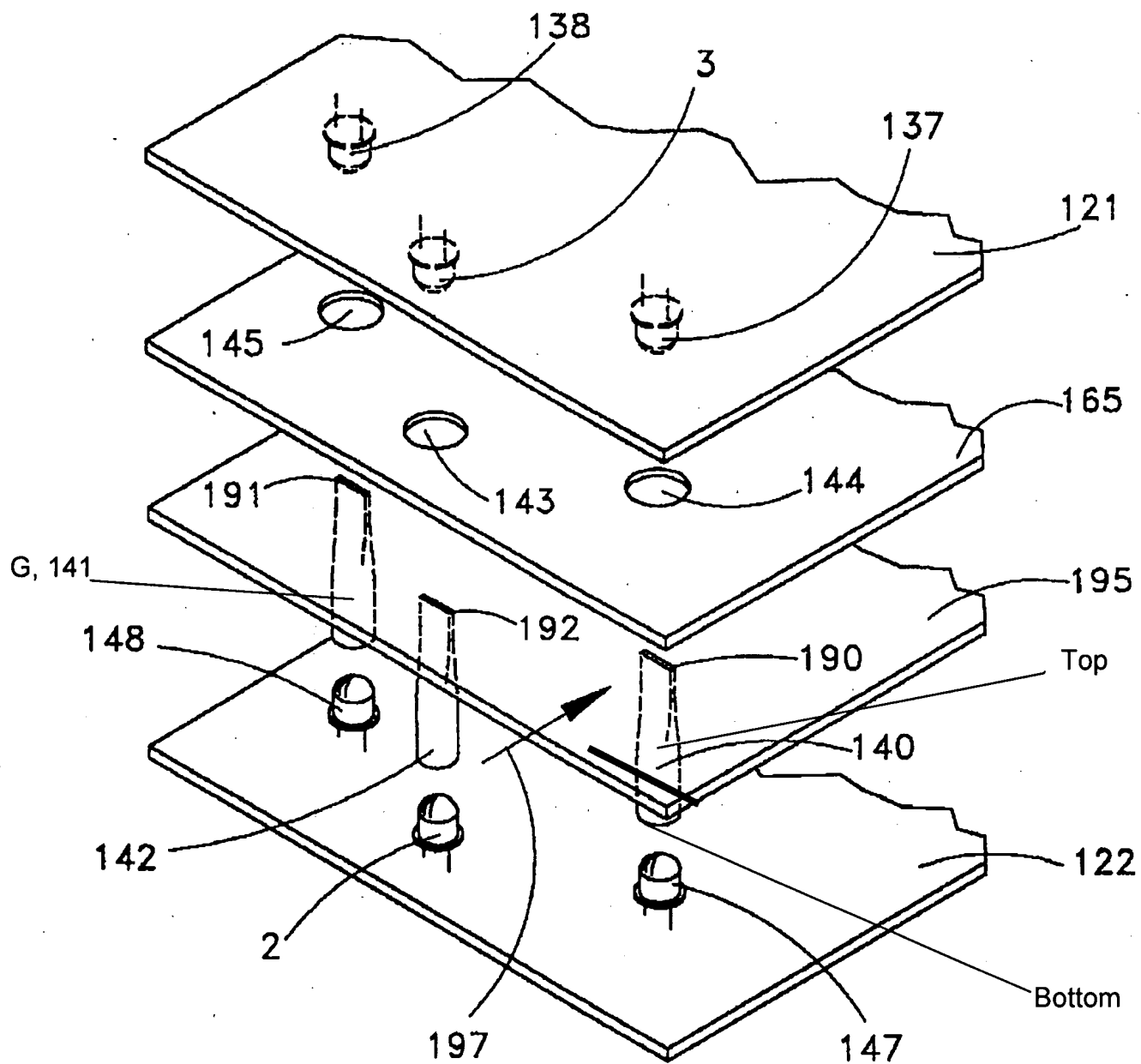


FIG. 10

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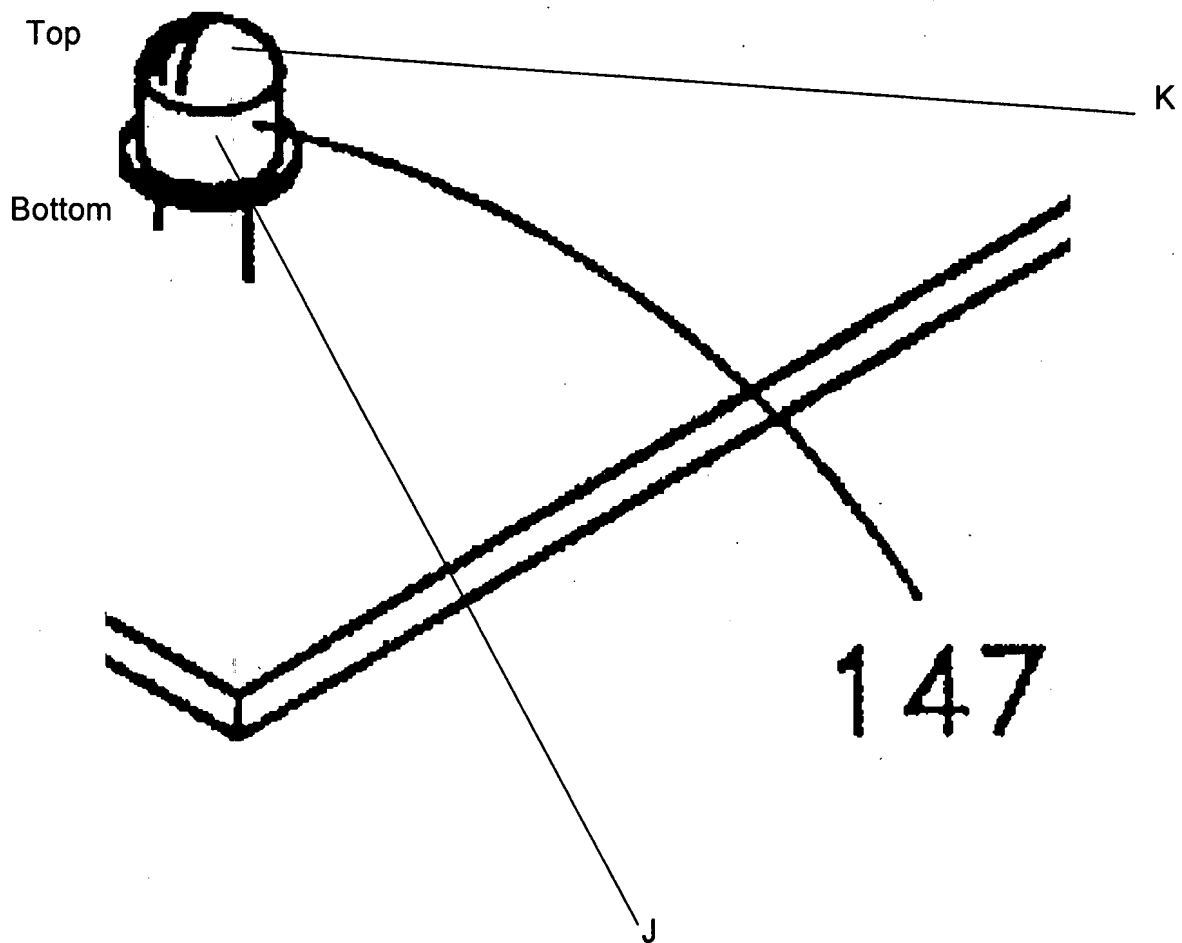


FIG. G1

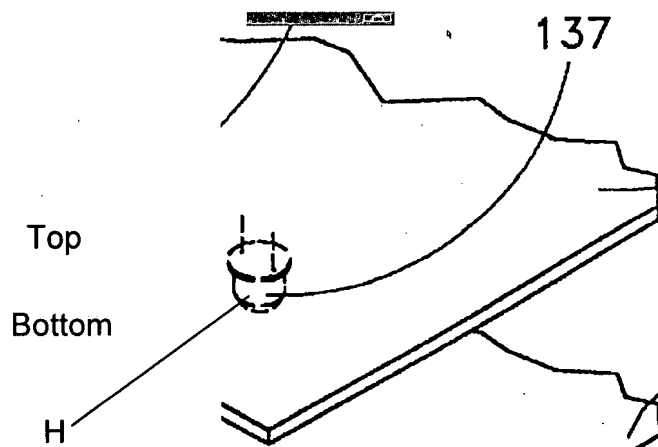


FIG. G2

Response to Arguments

Applicant's arguments filed 29 May 2007 have been fully considered but they are not persuasive.

Applicant asserts that Plesko does not anticipate the present invention since Plesko does not become operative ***only*** when the removable banknote storing unit is positioned within the banknote receiving unit since the banknote storing unit and banknote receiving unit Plesko can operate separately. The fact that Plesko is operational with the banknote storing unit in the banknote receiving unit is enough to anticipate Applicant's invention. Further, consider if the user decided to permanently attach the banknote storing unit and banknote receiving unit together or never take the pieces apart; this would more surely anticipate the Applicant's invention without the need for a secondary reference.

Regarding the argument that Plesko teaches away from a cam driven pusher plate, the ***cam*** driven pusher plate is not claimed, only a *pusher*. Therefore, rollers can be construed as being capable of pushing banknotes.

Finally, Applicant states, "Again, referring to Figure 1, this is the validation module 21 and there is no teaching of a passive light guide member of any configuration mounted within the storage unit for the banknotes, that is the stacker module 22." However, referring to FIG. 1, the validation module 21 is within stacker module 22, and light guide 142 is within stacker module 22. Therefore, light guide 142 is within stacker module 22.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald W. McClain whose telephone number is (571) 272-7803. The examiner can normally be reached on Monday through Friday from 7:30 a.m. to 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gerald W. McClain
Examiner
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